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ITU A Z • Vol 13 No 1 • March 2016 • 157-169

A critical review of ornament in contemporary architectural theory and practice

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Received: March 2015 • Final Acceptance: December 2015

Abstract

For over a century, the controversial issue of ornament has oscillated between the two extreme conditions of being condemned and praised. Although current architecture receives ornament enthusiastically due to its design potentials, it still remains as a problematic and critical topic, as it maintains its blurry and slippery character. The aim of this study is to construct the theoretical framework of ornament in the twenty-first century architectural domain. The paper intends to investigate the reemergence of this-yet-ambiguous issue to evaluate its new aspects, and redefine its limits in contemporary architectural theory and practice. Being much more than an intricate architectural element, an in-depth study of ornament overlaps its reemergence with social, cultural, and economical status quo. Through the examination of specific contemporary case studies, this study makes a layered reading of architectural ornament as an instrument of image-driven contemporary culture within spectacle-laden public sphere. In contemporary architecture, the digital, structural, sensual, representational, and symbolic facets stratify ornament metaphorically and literally, making it an intense medium of impression and expression. Ornamental buildings emerge as embodiments of consumption, exhibition, and public attention, by contributing to image-making, commercial success, and marketing strategy, in addition to the performance of ornament as a challenging designerly instrument.



Keywords

Ornament, Contemporary Architecture, Façade, Image, Representation.

1. Introduction

For over a century, the controversial issue of ornament has oscillated between the two extreme conditions of being condemned and praised. Jacques Herzog, the partner of the Swiss architecture office Herzog & de Meuron, reveals that they do not need to explain the necessity of ornament anymore, or apologize for a decorative detail in their works, since ornament becomes one with the form of their building (Chevrier & Herzog, 2006). This statement elaborates the current conception of ornament, as architects enthusiastically appreciate its design potentials. However, ornament still remains as a problematic and critical topic, as it maintains its blurry, unclear, and slippery character. The aim of this study is to construct the theoretical framework of ornament in the twenty-first century architectural domain. It is intended to further investigate the re-emergence of this-yet-ambiguous issue to evaluate its new aspects, and redefine its limits in contemporary architectural theory and practice. In addition to deciphering ornament, through the examination of specific contemporary case studies, this study makes a layered reading of architectural ornament as an instrument of image-driven contemporary culture within spectacle-laden public sphere.

As this study argues, ornament has not emerged in contemporary architectural theory and practice in the historical and traditional sense. The historical conception of ornament was interwoven with the history of style, each of which produced its own ornaments per se with a clear definition and set of rules for its design, production, and application. In contrast to traditional conceptions, ornament in contemporary architecture is laden with new aspects, as it expands through the immaterial realm of virtual reality by means of digital medium. Accordingly, the current conception of ornament in terms of scale can vary from an architectural detail to an urban fabric. Moreover, ornament in contemporary architecture can be applied as extrinsically or intrinsically to the building, ranging from being a graphic composition to a flat image, from a relief to

a three-dimensional sculptural construction.

The contemporary age is deprived of a specific style, yet it is governed by the paradigm of digital technology, which enables the design and production of intrinsic surface effects and dynamic ornaments. The advanced technology becomes a distinctive feature of architectural surface, which supports the idea that the reemergence of ornament in the twenty-first century is grounded on the highly performative computer-aided design (CAD) and computer-aided manufacturing (CAM) programs. Using technology as a tool, ornament in contemporary architecture becomes a justification of experimenting with form, structure, and surface.

2. Current interest in ornament

In the last decade, the emergence of a vast array of exhibitions, journals, and books indicate the current interest in



Figure 1. Posters of selected exhibitions: Deep Surface: Contemporary Ornament and Pattern, Ornament and Abstraction, Lace of Architecture, The Power of Ornament, Re-Sampling Ornament.

Table 1. List of exhibitions on ornament since 2005.

| Date | Name | Curator | Place | City, Country |
|---------------------------|--|--|--|--------------------------------|
| 06.06 25.07.2015 | Common Patterns | - | Centre For Contemporary Art | Londonderry, Ireland |
| 30.05 06.09.2015 | Structure and Ornament: Leo Saul Berk | Jo-Anne Birnie Danzker | Frye Art Museum | Seattle, USA |
| 11.05 25.06.2015 | Wilderness and Ornament: David Wiseman | - | R & Company Gallery | New York, USA |
| 10.04 09.05.2015 | Embellish | - | Open Studio | Toronto, Canada |
| 03.03 09.07.2015 | Nature as Ornament in Applied Arts | - | Sydney Living Museums | Sydney, Australia |
| 13.02 25.05.2015 | Patterns For (Re) cognition | Vincent Meessen | Kunsthalle Basel | Basel, Switzerland |
| 04.02 27.02.2015 | Ornamenting Crime | Irena Jurek | Zürcher Gallery | New York, USA |
| 21.01 12.04.2015 | Geometries of Difference: New Approaches to Ornament and Abstraction | Murtaza Vali | Samuel Dorsky Museum of Art | New York, USA |
| 17.12.2014- 19.04.2015 | Ways to Modernism: Joseph Hoffmann, Adolf Loos, and Their Impact | Matthias Boeckl and Christian Witt- Dörring | Austrian Museum of Applied Arts (MAK) | Vienna, Austria |
| 29.11.2014- 01.11.2015 | Dis Order: Patterns and Structures in the Collection | - | Museum Folkwang | Essen, Germany |
| 22 28.09.2014 | The Grammar of Order | - | The Tetley | Leeds, United Kingdom |
| 28.06 23.08.2014 | Sign, Pattern, Ornament | - | Gallery Obrist | Essen, Germany |
| 05-23.08. 2013 | Grammar of Ornament | Rachel Barron | The Briggait Artists' Studios | Glasgow, Scotland |
| 12-21.04.2013 | Famous Ornament | - | Youkobo Art Space | Tokyo, Japan |
| 03-04.04. 2013 | Pure Ornament | - | Ann Long Fine Art Gallery | Charleston, USA |
| 08.02 10.03.2013 | Ornament and Crime: Parastou Forouhar | Joanna Inglot | Law Warschaw Gallery | St. Paul / MN, USA |
| 29.11.2012- 24.03.2013 | The Traces of Modernism: Quiet Revolutions in Ornament | - | Moravian Museum of Applied Arts | Brno, Czech Republic |
| 30.06 01.09.2012 | Ubiquitous: Aspects of Contemporary Pattern | Ioana Gordon-Smith | Objectspace | Auckland, Australia |
| 02.06.2012- 06.01.2013 | Ornament: Perspectives on Modernism | Julia Wallner, Thomas, Döring, Regine Nahrwold | Wolfsburg Art Museum | Wolfsburg, Germany |
| 24.03.2012- 06.01.2013 | The Body Adorned: Dressing London | - | Horniman Museum | London, UK |
| 19.03 05.05.2012 | Brute Ornament | Murtaza Vali | Green Art Gallery | Dubai, United Arab Emirates |

| 22.02 02.03.2012 | Ornamentalism | - | Bar Lane Studios | York, United Kingdom |
|---------------------------|---|--|--|-------------------------------------|
| 16.02 16.05.2012 | Art, Pattern and Complexity | Margot Osborne | RiAus Gallery | Adelaide, Australia |
| 24.09.2011- 30.01.2012 | Deep Surface: Contemporary Ornament and Pattern | Denise Gonzales Crisp and S. Yelavich | CAM Raleigh Museum | Raleigh / NC, USA |
| 08.07 03.10.2011 | Political Patterns – Changing Ornaments | Sabine B. Vogel | IFA Galleries | Berlin and Stuttgart, Germany |
| 29.09 14.11.2010 | Design Criminals. Or a New Joy into the World | Sam Jacob | Austrian Museum of Applied Arts (MAK) | Vienna, Austria |
| 05-07.11. 2010 | Is Ornament a Crime?: Rethinking the Role of Decoration in Contemporary Wood | Cindi Strauss | Exposition of Sculpture Objects & Functional Art (SOFA) | Chicago, USA |
| 06.06 12.09.2010 | Pattern, Costume, and Ornament in African and African-American Art | - | Birmingham Museum of Art | Birmingham / AL, USA |
| 06.10 19.12.2009 | Lace of Architecture | Odile Werner & S. Trelcat | Maison de l'Arch. et de la Ville (MAV) | Paris, France |
| 05.09.2009 | Ornament is Crime? | Richard Slee | Middlesbrough Inst. of Modern Art | Middlesbrough, UK |
| 16.05 20.09.2009 | Visual Delight: Ornament and Pattern in Modern and Contemporary Design | Diane Minnite | Philadelphia Museum of Art (PMA) | Pennsylvania, USA |
| 21.01- 17.05.2009 | The Power of Ornament | Sabine B. Vogel | Belvedere Palace & Art Museum | Vienna, Austria |
| 18.10.2008- 15.02.2009 | Ornament and Pride | Nina Folkersma | Municipal Museum of Contemporary Art (SMAK) | Ghent, Belgium |
| 01.08- 21.09.2008 | Re-Sampling Ornament | Oliver Domeisen & Francesca Ferguson | Swiss Architecture Museum (SAM) | Basel, Switzerland |
| 17.06 19.10.2008 | Brno Echo: Ornament and Crime from Adolf Loos to Now | Abbott Miller | Moravian Museum of Applied Arts | Brno, Czech Republic |
| 28.09 25.11.2007 | Ornament and Architecture: The Beauty in Utility | - | National Museums | Berlin, Germany |
| 17.08- 20.09.2005 | Technology, Performance, Ornament | Ben Pell | Urban Center Gallery | New York, USA |
| 05.03- 26.03.2005 | Ornament | Melissa Urcan | 216 Exhibition Space and the Edge Gallery | Chicago and Pittsburgh, USA |

ornament. Globally, the reappearance of ornament became a theme for various architecture exhibitions; *Nature as Ornament in Applied Arts* in Sydney (2015), *Dis Order: Patterns and Structures in the Collection* in Essen (2014), *Deep Surface: Contemporary Ornament and Pattern* in Raleigh (2011), *Lace of Architecture* in Paris (2009), *Visual De-* *light: Ornament and Pattern in Modern and Contemporary Design* in Pennsylvania (2009), *Re-Sampling Ornament* in Swiss Architecture Museum in Basel (2008), and *Technology, Performance*, *Ornament* in New York (2005), to name a few (Table 1 and Figure 1).

Journal issues analyze the return of ornament in contemporary architecture, elaborating its historical overview, specifically in the "Ornament" issue of *Forward* (2009, No. 2), "Ornament: Return of the Repressed" issue of *Zona* (2009, No. 4), "Patterns of Architecture" issue of *Architectural Design* (2009, No. 6), "Pitch, Type, Pattern, Script, Algorithm, Ornament" issue of *Arch*+ (2008, No. 189), *Werk*, *Bauen* + Wohnen (2007, No. 11), "Decoration" issue of *306090 Books* (2006, No. 10), *Eye: The International Review of Graphic Design* (2005, No. 58), "Ornament: Decorative Traditions in Architecture" issue of *Oase* (2004, No.



Figure 2. Covers of selected journals: L'architecture d'aujourd'hui (2001, No. 333), Oase (2004, No. 65), 306090 Books (2006, No. 10), Arch + (2008, No. 189), Forward (2009, No. 2), Zona (2009, No. 4), Architectural Design (2009, No. 6), Arredamento Mimarlık (2010, No. 241).

65), "Ornament / Ornement" issue of *L'architecture d'aujourd'hui* (2001, No. 333). Within Turkish architectural milieu, the journal *Arredamento Mimarlık* (2010, No. 241) published the issue of "Çağdaş Mimarlıkta Bezeme [Ornament in Contemporary Architecture]" (Balık & Allmer, 2010), (Figure 2).

Current literature on ornament, while investigating its sensual, symbolic, and material aspects, embraces its return in parallel to the digital age. Analyzing the ornamental façades of contemporary buildings, in his edited book The Articulate Surface: Ornament and Technology in Contemporary Architecture, Ben Pell (2010) argues that there is an apparent split between architectural theory and practice, which, on one hand, relates to representation and symbolic expression, and, on the other hand, comprises technique, utility, material, and architectural detailing. Yet the renewed interest in ornament, which emerged due to the advancement of digital design and fabrication, points to the potential of binding theory and practice through the articulation of surface. Pell presents his argument by categorizing contemporary buildings in terms of applied, perforated/cut, layered, formed/cast, and stacked/tiled. Similarly, in Ornament Today: Digital, Material, Structural, Jörg H. Gleiter (2012) argues that ornament has returned to architectural milieu due to the expansion of digital technology with a concern on structural and material aspects more than historical discussions of style and taste. Departing from the modern idea of abolition of ornament, six architectural theorists contributed to the book with texts that range from elaborations on architects, primarily Leon Battista Alberti, Owen Jones, Louis H. Sullivan, and Adolf Loos, to discussions on digital design and manufacturing technology. In the book Ornament: The Politics of Architecture and Subjectivity, Antoine Picon (2013) analyzes the history of ornament and elaborates its contemporary conception. Referring to the characteristics of ornament in architectural history, Picon explores the limits of ornament in contemporary architecture. He argues that ornament has returned in direct relation-

ship with the advancement of digital technology and expanded its content to include texture, pattern, structure, façade plasticity, digital dynamic urban maps, and neuroscientific scans. On the other hand, Picon asserts that ornament has lost its political and subjective aspects, while symbolizing the social rank of the client or bearing the personal marks of the architect. In the supplementary catalogue to the Re-Sampling Ornament exhibition in Basel, Oliver Domeisen (2008) argues that the theories of Owen Jones, John Ruskin, Gottfried Semper, and William Hogarth should be reevaluated in contemporary architecture, since they serve as a basis for constructing the framework of the contemporary application of ornament. Domeisen emphasizes the contemporary emergence of ornament in parallel with the new construction and manufacturing technologies, specifically CNC milling, laser-cutting, three-dimensional printing, and robotic layering. In this sense, as illustrated in the book, the contemporary reading of ornament covers a wide range of natural and organic forms, microscopic patterns and human bodies, corporate brand logos and iconography, textile and surface effects. Lastly, in the edited book Pattern: Ornament, Structure and Behavior, Andrea Gleiniger and Georg Vrachliotis analyze pattern and ornament in the age of digital technology. Along with four other theorists, Gleiniger and Vrachliotis (2009) argue that the new ornament, which emerges by means of digital technology, derives from pattern and pattern formation. Dwelling on the topics of algorithm, behavioral pattern, neuroscientific pattern, and musical pattern, the authors investigate global expansions of ornament in the digital age.

Contemporary literature explores ornament from a broad perspective of science, engineering, mathematics, music, and so on, rather than reducing it to architectural scale. The theorists argue that the reemergence of ornament in contemporary architectural theory and practice is grounded on the advanced technology of computer-based design and manufacturing programs. Consequently, they tend to expand the scope of ornament in relation to the new concepts of the digital realm. Furthermore, despite the global interest in ornament, contemporary research in Turkey is very limited with no architecture exhibition at all.

3. The expanded vocabulary of ornament in contemporary architecture

The contemporary architectural theory and practice lacks a simple definition of ornament, which makes it justifiable on many grounds, such as experimenting with digital tools, novel materials and tectonics, investigating different surface effects and sustainable elements, producing affects and sensations, representing the building function, advertising a brand, and making contextual references. In this sense, rather than having a precise and clear definition like the ornamental styles in architectural history, ornament in contemporary architecture has an expanded vocabulary, through which architects are able to experiment, design, and produce from a broad perspective and with a different motive within architectural domain.

Ornament in contemporary architecture emerges as an elaborate medium of consumption and production by means of new tools, methods, and techniques. The idea of seamlessness and fluency becomes the current par-



Figure 3. Façade detail of the Ravensbourne College, Foreign Office Architects (FOA), London, UK, 2010.

adigms of the exuberant use of ornament in the digital age. The integration of CAD and CAM introduces the concepts of scripture, algorithm, morphology, deformation, distortion, evolution, formation, mutation, generation, transformation, and variation. Consequently, new terms are added to the vocabulary of ornament, such as pixellization, porosity, fractal, digital, and virtual. Besides, pattern in its broadest sense has been included to the research area of ornament, as it consists of the concepts of sequential, dynamic, configurative, informative, performative, morphogenetic, and parametric (Levit, 2008; Garcia, 2009; Schumacher, 2009; Gleiniger and Vrachliotis, 2009). The expanded vocabulary of ornament allows contemporary architects to define ornament according to their own design approaches. As of now, ornament is elaborated through various attributions, such as "coded ornament", "dynamic ornament", "contemporary ornament", "new ornament", "ornamentalism", "ornamatics", and "digital Nouveau".

Contemporary architects use advanced technology with an intention to demonstrate their virtuosity in designing and producing surface effects. In the case of the Ravensbourne College in Greenwich, UK, built in 2010 by the Foreign Office Architects (FOA), the intention was to express the novelty of fabrication technology (Figure 3). The monolithic building is covered with 28,000 aluminium tiles in different sizes and colors, which produce unique combinations on the façades around doors and windows. Blurring the building scale, dazzling tessellations create a visual play, and produce affects and sensations, as also proposed by Farshid Moussavi and Michael Kubo (2006) in *The Function of Ornament*. Yet the intention of representing the novelty of advanced technology resonates more to the argument of the architect Robert Levit (2008) who stresses that ornament in contemporary architecture associates more to the symbolic aspect than the sensual and the functional.

Today, the symbolic aspect of ornament is widely-used especially in terms of representing the function of the building as an adaptation of the postmodern approach. Charles Jencks (2011) argues that an iconic building has to carry plural meanings and mixed metaphors in order to continue its distinctive presence as a landmark. Making a critique of the decorated shed in



Figure 4. Beijing National Aquatics Center, PTW Architects, Beijing, China, 2007.

Figure 5. Outer and inner details of the UK Pavilion, Heatherwick, Shanghai, 2010.

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terms of signs attached to a flat surface, Jencks (2011) notes that symbolic architecture merges multiple meanings with functional and aesthetic dimensions, rather than dealing with signs. He coins the term "enigmatic signifier" as a representative of the multilayered meaning manifested through ornamental façades. With an intention to avoid rapid consumption and the territory of superficiality by reducing to an obvious denotation, the enigmatic signifier reveals connotations through an in-depth narrative, representation, and interpretation. Beijing National Aquatics Center, widely known as the Water Cube, functions as a swimming sports building, and represents water bubbles on all of its façades (Figure 4). Built by the Australian architecture office PTW Architects in collaboration with Arup in 2007, the rectangular building is an example of the advanced construction technology with the integration of steel frame and pneumatic cladding. The enigmatic signifier reveals multiple meanings on the ornamental façades, as it expresses the novelty in construction technology, associates with the Chinese symbolism through the rectangular form, and represents the building function by imitating giant irregular bubbles.

Ornament as the representation of culture has long been one of its primary applications. Ubiquitously seen in public buildings, especially in exposition constructions, ornament becomes a tool of public promotion and representation for commercial success. As Umberto Eco (1997) states, in an expo, architecture emerges first as a message,



Figure 6. Arlanda Hotel, BIG, Stockholm, Sweden, 2007.

and then as a functional building, since the aim of expo buildings is to attract attention with their façades. As a case, the United Kingdom Expo Pavilion in Shanghai in 2010 by the London-based Heatherwick Studio is worth mentioning (Figure 5). Being referred as the Seed Cathedral, the building was created out of 60,000 transparent fiber optic rods, each of which displays a different seed at the tip. Inside the building, the assemblage of the displayed seeds forms curvilinear patterns all over, whereas on the outside, the tips of the seeds form a hairy texture. The pavilion oscillates between provoking tactility by the unique assembly of fiber optic rods and evoking visual surface effects by patterns that are perceived differently when seen from a distance and up close.

The symbolic associations of ornament lead to representing prestige, social status, title, and affiliation of



Figure 7. Façade details of the 5th Avenue Louis Vuitton Store, Jun Aoki, New York, USA, 2004.

specific figures on building façades. In this case, the ornamental façades of the Arlanda Hotel, a 2007-project-design by Bjarke Ingels Group (BIG) in Stockholm, represent the symbolic narrative of power by depicting giant portraits of the royal figures of Sweden (Figure 6). Signifying the status of the Swedish authority, the façades reveal the significant role of ornament as urban portraits, as well as the embodiment and extension of power (Balık & Allmer, 2015).

One of the essential applications of ornament today relates to the aesthetics of consumption. The Louis Vuitton Store in the 5th Avenue of New York, built by the Japanese architect Jun Aoki in 2004, can be attributed as one of the contemporary conceptions of the decorated shed (Figure 7). The 1930 building by Cross & Cross, in which the store is located, is clad with glasses that were ornamented with the famous checkered pattern of the brand.



Figure 8. Façade detail of the 40 Bond apartments, Herzog & de Meuron, New York, USA, 2007.



Figure 9. Beijing National Stadium, Herzog & de Meuron, Beijing, China, 2008.

From outside, the façades perform as a veil by means of the overlapped patterned glasses. Creating a moiré effect, façades draw the attention of passersby, allowing them to have a glimpse of interior at some points. Playing with the opacity of vision, the façades represent the building function by imitating the moiré effect of Louis Vuitton, as much as they turn the brand identity and the need for advertisement into ornament.

In contrast to the representational use of ornament as in the examples of the Beijing National Aquatics Center and the 5th Avenue Louis Vuitton Store, Alejandro Zaero-Polo criticizes the representation of the building function through surface ornaments (Van Raaij, 2014). For him, ornament should conform to the building context, its environment or local culture. For example, the 40 Bond apartment building, built by Herzog & de Meuron in New York in 2007, is covered with an ornamental surface in the ground floor level (Figure 8). The ornamental element, which was made of cast aluminium with a relief-like structure, functions as a kind of fence for private accesses to ground floor terraces, as much as it sends the curious looks of passersby away from the ground floor windows. Being an interpretation of the urban graffiti culture, the ornamental fence composes a graphic pattern that extends through the aluminium and wooden surfaces of the outer cladding and the interior decoration. In accordance with the media theorist Jean Baudrillard's (1993a) critique of graffiti as the invader of the white city, the graffiti stylizations of the 40 Bond building superimpose many architectural layers, as they use the surfaces as blank canvases without a beginning and an end.

Contemporary architecture has long been an experimental ground for integrating ornamental elements as a part of load-bearing elements with an intention to construct structural ornament. As Jencks (2011) further elaborates, ornament becomes necessary when it is integral to architecture as in the sense of structural ornament. Beijing National Stadium, built by the Swiss architecture office Herzog & de Meuron in 2008, is one of the most sophisticated examples in this sense

(Figure 9). Widely known as the Bird's Nest, the Beijing National Stadium derives from the idea of creating a structure like a nest that unites space and surface, which are essentially two different entities. In this sense, the Dutch architect Winy Maas, the partner of the architecture office MVRDV, refers to the building as the culmination of new ornamentation (Van Raaij, 2014). As Jacques Herzog explains, if a contemporary building lacks the unity of space and surface, ornament becomes additional much like a wallpaper (Chevrier & Herzog, 2006). Similarly, Greg Lynn (2004), who experiments with structural ornament to explore the potentials of materials, remarks that structural ornament frees ornament from being an applied decoration. In the Bird's Nest, load-bearing elements merge with non-load-bearing ones, and work seamlessly as a single and intrinsic element. Blurring the strict borders of structure and ornament, the contemporary application of structural ornament emerges as a hybrid element.

Current applications of ornament extend to media façades, or digital ornaments, which are activated as screens, and attract viewers' attention by rendering the buildings visible at night. Produced and presented in the digital medium, media façades merge electronics, different materials, and building façades. In this sense, technology helps the production of nonconventional ornamental elements, which cannot be produced by conventional tools and methods. Media façade performs as a mediated layer, and blurs the distinction between static façade and flowing lights. With an emphasis on temporality, it creates dichotomies of materiality and immateriality, permanence and temporality. Rather than presenting a constant and fixed surface, the digital façade develops into a medium of continuous interactivity (Lavin, 2011). The new media theorist Lev Manovich (2006) argues that the media façade spreads digital information over a physical surface, and thus expands beyond the Venturian conception of two-dimensional electronic screen as a moving ornament. In the case of the House of Industry, neon lights turn the building into spectacle at the center of Copenhagen at night (Figure 10). The brick building, designed by Erik Møller in 1979, was comprehensively renovated in 2013 by Transform Architects, as they demolished the ceramic façades and replaced it with glass façades with steel structures. The neon lights planted on the glass façades wrap the whole construction, and continuously flow while changing colors. The digital ornament adds a layer of ever changing grid patterns to the static glass façade, but also repeats the patterns ad infinitum.

Ornament usually associates with the façades or the plasticity of buildings; yet it also establishes relationships with the building and the urban fabric. In accordance with the increasing popularity of satellite imagery in the post-information age, satellite view as a new ornamental scale becomes of interest. To develop critical assessments, this issue is explored in recent architectural texts. Van Raaij (2014) points to the current global trend of artificial island designs that have ornamental forms, whereas Picon (2013) notes that contemporary buildings of



Figure 10. House of Industry, Transform Architects, Copenhagen, Denmark, 2013.

starchitects resemble ornaments at the scale of the city. The architectural critic Jonathan Glancey elaborates the idea of viewing cities as "gigantic carpets or textiles rolled across vast tracks of intensely used lands" (Glancey, 2012, p. 38). Buildings can be viewed from different scales and distances, as well as from various points of view, which make them reveal different ornamental dimensions.

The contemporary application of ornament proposes novel aspects, such as structural ornament and digital ornament, as much as it reinterprets the traditional applications of representing culture, function, brand, power, and context. In the light of the case studies, it can be argued one of the primary motives of applying ornament in contemporary architecture is to attract public attention and to present spectacle. In this sense, the advancement of digital technology becomes a tool, rather than a motive and a primary ground of justification.

4. Ornaments of the spectacle

Today in the age of visual communication, a flood of images dominates the realm of architecture. Beginning with the twentieth-century widespread use of photography, advertising, and publishing technology, mass media expanded worldwide by transforming objects into images. Contemporary culture is represented by the accumulation of spectacles, which mediates the social relation among people. In this sense, spectacle refers to consuming products for their sign values, such as appearance, fame, and public attention, rather than their use values.

To a great extent, this issue was previously addressed by Charles Baudelaire in the nineteenth-century together with Walter Benjamin, and theorized by the twentieth-century theorists, Guy Debord, Marshall McLuhan, Neil Postman, Roland Barthes, Michel Foucault, and Jean Baudrillard. Benjamin (1968) deciphers the modern metropolis as an endless spectacle, a visual show of spectacular images, dioramas, tempting dreams, and a realm of phantasmagoria in his 1939 text, "Paris – Capital of the Nineteenth Century". Debord (2002) emphasizes that media

dominates the everyday life through consumption and mass production in his 1967 treatise, Society of the Spectacle. Barthes (1991) makes a critique of the spectacle and the authentic experience in his 1957 text "The World of Wrestling", as he suggests the concept of the society of the spectacle a decade before Debord. Baudrillard (1993b) argues that the industry of semiotics goes further than the materialist rules of commodity, as it transforms everything into advertisement, media, or image. The dominating paradigm of visuality turns bodily presence into spectacle, media, and image, and links the spectacle to the social demand of astonishment and amazement.

Following the twentieth-century views, the influence of visuality increases in contemporary age. The criticism of spectacle in current architectural domain consists of immaterial aspects of image, including flow, density, frequency, pixel, resolution, color, channel, bit, and frame (Wigley, 2008). Today, image is reproduced infinitely in the spectacle-laden public sphere, so that the people are subjected to absorb a profusion of images every day. Correspondingly, in an image-driven culture, much emphasis is given to visuality, surface, and surface effects without the intention of contemplation but only consumption.

In parallel, ornament in contemporary architecture contributes to image-making, commercial success, and marketing strategy, as much as it becomes a designerly instrument of achieving astonishment. As seen from the case studies that sample ornament as the representation of function, culture, power, brand, urban context, and digital virtuosity, ornamental buildings become embodiments of consumption, exhibition, and public attention.

5. Conclusion

Literature of the last decade continuously highlights that ornament in contemporary architecture has a new definition and aspect. As this study demonstrates, ornament has a variety of layers. Being much more than an intricate architectural element, an indepth study of ornament overlaps its reemergence with social, cultural, and

economical status quo.

The need for commercial success and a profitable image of the building unfolds the connection of ornament and capitalism. Architecture relates to the power of the client; thus the ornamental façades emerge as a result of compromise and commercialization between client and architect. Today, the budget of the client and mutual settlements with the architect determine the limits for creating spectacular and astonishing façades. The ornamental dimension is developed as an extension of constructing a brand image and sign exchange value. Accordingly, contemporary application of ornament does not discriminate between a public building and a housing complex. Ornament becomes a symbol of prestige and an instrument of power, in addition to being a representation of building function or program.

In contemporary architecture, the digital, structural, sensual, representational, and symbolic facets stratify ornament metaphorically and literally. Ornament contributes to the contemporaneity of the city and the diversity of culture much like an advertisement board, a graffiti, or a tattoo, not primarily as an element of utility but as an intense medium of impression, expression, and representation. The profusion of ornamental buildings and architecture exhibitions that continue their worldwide expansion demonstrates that neither architects nor investors have done with revealing the potentials of ornament. In the future years, it is very possible that ornament will continue to be a critical discursive field for theorists, a playground of spectacle for public, and a challenging designerly instrument for architects more than ever.

Acknowledgements

This research has been supported by Dokuz Eylül University, Scientific Research and Development Support Program, No. 2010. KB.FEN.020.

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